Bank of Japan Review

18-E-1

The recent growing momentum of private equity funds

Financial System and Bank Examination Department
Koki Watanabe*, Kosuke Igarashi, and Hiroki Inaba**

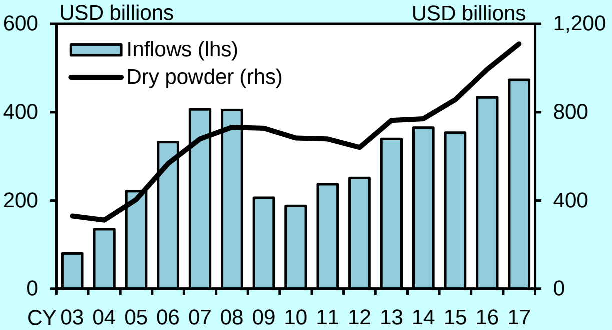
April 2018

The worldwide growing momentum of private equity (PE) funds -- funds that mainly invest in unlisted shares -- has recently attracted attention among financial market participants, with inflows from investors into such funds surpassing the peak before the global financial crisis (GFC). The reasons for the increase in inflows into PE funds include that domestic and foreign institutional investors have intensified their search for yield and preference for investments generating relatively high returns amid the prolonged low interest rate environment. On the back of these active inflows, investment activities by PE funds in firms are expanding globally, helping firms with the smooth procurement of funding. Nevertheless, if going forward PE funds increase their leverage to achieve higher returns, this may pose a risk to the financial system, thus warranting a monitoring of developments in PE funds.

Introduction

Private equity (PE) funds are funds that mainly invest in unlisted shares. Recently, PE funds have attracted growing attention among financial market participants, with capital inflows from investors into PE funds increasing worldwide. According to data compiled by Preqin on PE funds around the world, capital inflows in 2017 markedly exceeded the levels before the global financial crisis (GFC), as shown in Chart 1. In addition, the balance of the amount PE funds have raised minus the amount they have actually invested (i.e., PE funds' unused investment funds, called "dry powder" in the industry) has continued to hit record highs in the past few years.

[Chart 1] Capital inflows into PE funds[1]



Source: Preqin.

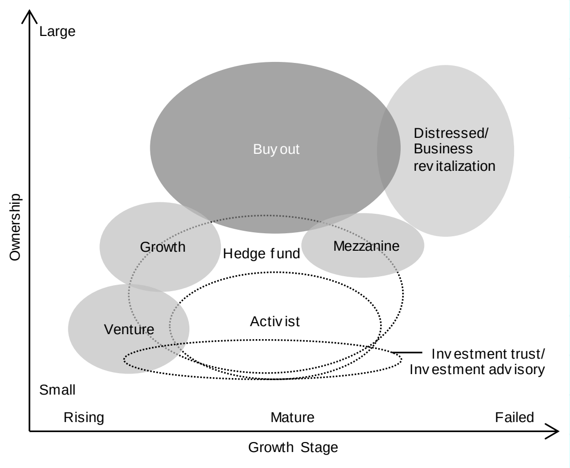
In addition to this role as investment products, PE funds also help firms with the smooth procurement of funding through their investment activities. A remarkable development in this context is that in the United States, the percentage of firms that are listed on the stock exchanges has halved since peaking in 1996. It has been suggested that a reason for this is that firms' private financing methods, such as PE funds, have become increasingly diversified. Many startup companies such as IT companies in the United States have benefitted from continuing operating over the long term without listing as a public firm. At the same time, investment activities among PE funds have also expanded in Japan, reflecting firms' need to sell off businesses due to growing awareness of capital efficiency and the need for business succession stemming from the aging of top management.

On the other hand, investment activities by PE funds are often accompanied by debt financing, which can be a risk factor in the market for loans by banks/non-banks and in corporate bond markets. This issue has been the subject of debate worldwide both before and after the GFC, and has attracted further attention due in part to the fact that U.S. credit markets have gained momentum in recent years.[2] Against this background, this article seeks to establish some facts regarding the trends in capital inflows from investors into PE funds and PE funds' investment activities. It then discusses the risks that PE funds may pose to the financial system.

Overview of PE funds

What we call PE funds vary considerably in terms of their investment strategy depending on the ownership share and the growth stage of the target firms (Chart 2). The most typical investment strategy is the "buyout" strategy, in which PE funds increase their equity share in mature companies and improve corporate value through participating in management.[3] Other investment strategies include "venture" strategies, in which PE funds invest in startup companies to provide financial support to help them grow their business; "distress and business revitalization" strategies, where PE funds are actively involved in rebuilding poor-performing companies and carry out debt restructuring; "mezzanine" strategies, where PE funds invest in subordinated debt and preferred stocks; and "growth" strategies that fall between "buyout" and "venture" strategies. Generally speaking, all of the funds pursuing these strategies are classified as PE funds. On the other hand, "hedge funds," "investment trusts/investment advisors" and "activist" investors are not classified as PE funds because they mainly invest in listed companies, although there is some overlap with PE funds in terms of ownership shares and the growth stage of the target firms.[4]

[Chart 2] Investment strategy of funds



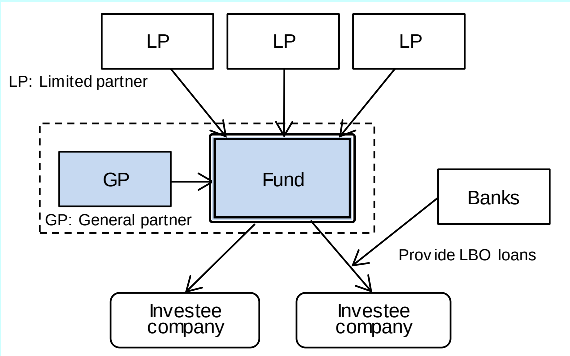
The general flow from the establishment of a PE fund to its dissolution is as follows (Chart 3).

(i) Fundraising: the fund management company launches the fund and seeks investment from several institutional investors. Institutional investors commit investment as limited partners (LP), and the management company contributes part of the capital as a general partner (GP).

(ii) Identification of investment targets and implementation of investments: the fund identifies unlisted companies or delisting targets worth investing in and then requests a portion of the funds committed by LPs in the so-called "capital call."[5] In the case of a buyout fund, since a large amount of funds is required for the acquisition at the time of investment, the fund supplements investors' funds with debt raised from banks and non-banks using assets of the target firm as collateral, which is called a leveraged buyout (LBO) loan. Moreover, LBO loans can be used to raise returns, since they have the effect of leveraging investments by allowing large acquisitions with less capital.[6] After making an investment, the GP aims to improve the corporate value of the firm by playing an active role in its management.

(iii) Profit-taking: after several years, the fund takes investment profits by selling its stake in the firm to other investors or through an initial public offering. The fund then returns the capital to LPs, distributes dividends among them and is dissolved.

[Chart 3] Structure of a PE fund

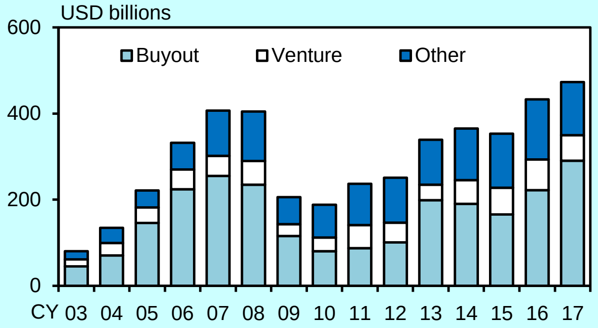


Thus, PE fund activities involve two major types of capital flows: (i) inflows of investments (commitments) from investors (LPs) into the fund at the fundraising stage, and (ii) investment flows from funds to firms once targets have been identified and investments are being implemented. The practice of relying on commitments and capital calls can result in a certain time lag between these two types of flows, while the size of the flows can differ due to the use of LBO loans. The following sections examine recent trends in these two flows.

Trend in capital flows from investors into PE funds

As mentioned above, in recent years the amount of global capital inflows into PE funds has exceeded the levels before the GFC. Looking at funds by investment strategy, the overall increase has been largely driven by buyout funds (Chart 4). Particularly in the United States, the main market for buyout funds, large funds have been established one after another.

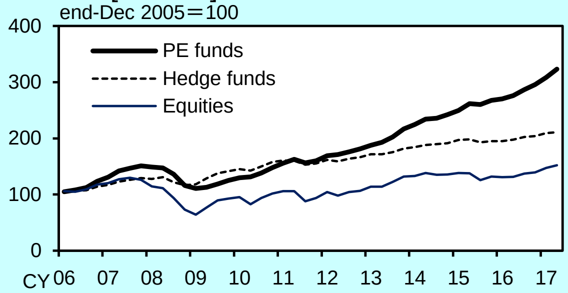
[Chart 4] Breakdown of inflows into PE funds



Source: Preqin.

The reasons for the increase in capital inflows into PE funds include that domestic and foreign institutional investors have intensified their search for yield and preference for PE funds as an alternative (non-traditional) investment generating relatively high returns amid the low interest rate environment. In fact, under the low interest rate environment since the GFC, PE funds' returns have been far higher than the returns of global stocks and hedge funds (Chart 5).

[Chart 5] Returns of PE funds



Note: The latest data are as of June 2017.

Reference: Overview of each index

PE funds	*Preqin Private Capital Quarterly Index* The index covers about 3,900 PE funds. The figures are calculated as below, based on the net asset value (NAV) of each investment. Returns = (Total NAV at the end of the term + Dividends for LPs) / (Total NAV at the beginning of the term + Capital call)
Hedge funds	*Eurekahedge Hedge Fund Index* The index covers about 2,700 hedge funds. The figures are the simple average of the returns of those funds, excluding fees to hedge funds.
Equities	*MSCI World Index* The index covers 1,652 constituents. The figures are the weighted average of all large-capital/mid-capital stocks in 23 major countries.

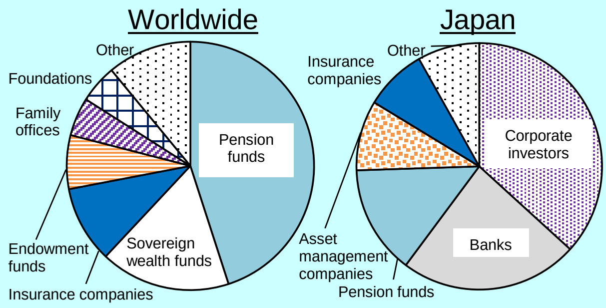
Sources: Preqin, Eurekahedge, and Bloomberg.

What are the reasons for the high returns of PE funds? PE funds' returns reflect (1) the liquidity risk premium derived from the difficulty in selling in the middle of an investment period that spans several years and (2) excess profits through the identification and effective governance of target firms. Regarding the latter, it is generally known that excess profits should not exist in an efficient market. However, it is often pointed out that in the case of investments in non-listed companies, PE funds can gain excess profits as there is little information disclosure and it is difficult for other companies to imitate the methods GPs use to improve companies' management.

Other reasons why PE funds have achieved higher returns on investment than other asset classes include (3) the business cycle which means that PE funds invested at a relatively low price immediately after the GFC and have been able to sell their investments at higher prices due to the favorable market environment until last year, and (4) the fact that the relative performance of hedge funds, another major form of alternative assets, has recently been sluggish. The reasons for the sluggish performance of hedge funds that have been highlighted are that until last year volatility in financial markets was low, which provided few profit opportunities for hedge funds, and that, in order to improve transparency, hedge funds have been forced to disclose their investment methods, making it easier for others to copy them and thus making it more difficult for hedge funds to earn excess profits.

The next question to address is what kinds of investors are investing their capital in PE funds. Due to the long-term low liquidity nature of PE funds' investment, many investors in PE funds globally consist of pension funds, sovereign wealth funds and insurance companies, which prefer long-term investments (Chart 6). On the other hand, looking at Japanese investors by category, the share of funds by institutional investors such as pension funds and insurance companies has been small because they started alternative investments relatively recently. Instead, corporate investors such as trading companies as well as banks, which have invested in PE funds from an early stage, continue to make up a large share. In recent years, more institutional investors and banks have started to invest in PE funds or raised the investment share of PE fund in their asset allocation. For example, the Government Pension Investment Fund (GPIF) has been pressing ahead with making arrangements to expand alternative investments, calling for applications from asset managers for investment in private equity, etc., in April 2017.

[Chart 6] Breakdown of investment in PE funds by type of investors

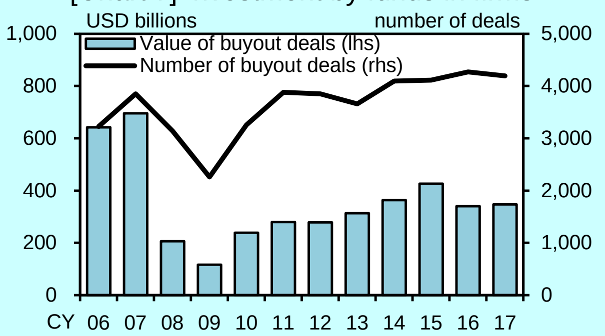


Note: The chart for worldwide PE funds is based on "Private Equity Growth in Transition" 2016, Deloitte Center for Financial Services, while that for Japan is based on "Japan-Based Investors in Alternative Assets" 2016, Preqin.

Trend in investments by PE funds in firms

Against the backdrop of active capital inflows into PE funds, PE funds' investment in firms has also continued to recover following the GFC (Chart 7). PE fund investment activity has been expanding globally, as seen in the fact that the number of projects that buyout funds invest in exceeds the level before the GFC. That said, in money terms, investment activity has leveled off since 2015 and remains at about half the value before the GFC, which contrasts with the capital inflows registered by PE funds. This sluggish growth in the amount invested has led to the accumulation of dry powder mentioned above.

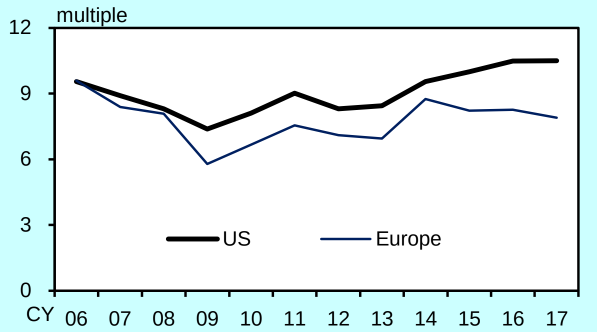
[Chart 7] Investment by funds in firms



Source: Preqin.

The reasons for the sluggish growth in the amount of investment by PE funds include comparatively high purchase prices. From an economic perspective, investments by buyout funds in firms are very similar to M&A activities among firms, except that in the former case the purchasing party is a fund, so the two activities directly compete with each other. Partly due to intensifying competition in the M&A market, purchase prices in the M&A market have recently been going up. Looking at M&A multiples, which are calculated as the ratio of purchase prices to investment companies' profits (specifically, their EBITDA, that is, profit before interest payment, tax and depreciation) and provide an indicator of the extent to which purchase prices are overvalued or undervalued, these have reached a value of 10 in the United States and are now higher than before the GFC (Chart 8). These increases in purchase prices in the M&A market have also raised the purchase prices PE funds need to pay, thus acting as a restraint on the amount they invest.

[Chart 8] M&A multiples (Valuation / EBITDA)



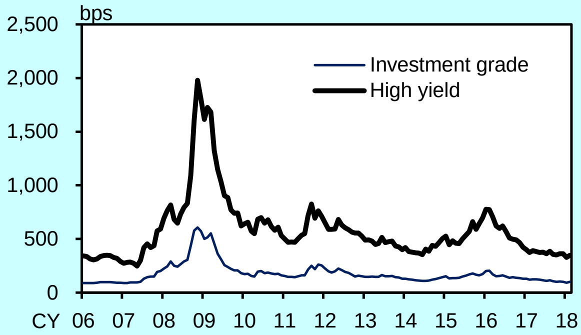
Note: The latest data for Europe are as of end-March 2017.
Source: PitchBook.

Risks to the financial system

In sum, while there are currently active capital inflows from investors into PE funds, investment by PE funds in firms has been sluggish. As a result, dry powder has been building up. Under these circumstances, the potential risk posed to the financial system due to increased leverage through LBO loans has again started to receive attention. In other words, there are concerns that PE funds may increase their investments in firms, simultaneously taking on excessive leverage in order to maintain high returns even under the expensive purchase price environment.

One reason for this growing concern is that the U.S. credit market has gained momentum in recent years. Spreads on U.S. corporate bonds, including high yield bonds, are on a downward trend due to investors' heightened search for yield (Chart 9). At the same time, in the U.S. loan market, the share of covenant-lite loans -- that is, loans with loose financial covenants on borrowers -- has been increasing. Following the lessons learned from the GFC, financial supervisors in the United States and Europe have instructed banks to refrain from high-leveraged loans; however, loans to funds such as direct lending funds that mainly target small and medium-sized enterprises and are not covered by such guidance have increased instead.[7] If PE funds continue to raise their leverage in the future under this benign U.S. credit market environment, this may pose a risk to the financial system, thus warranting a close monitoring of developments in PE funds.

[Chart 9] Spreads on U.S. corporate bonds



Note: The latest data are as of end-February 2018.
Source: Bloomberg.

Concluding Remarks

To sum up, in recent years, capital inflows from investors into PE funds have been increasing worldwide. The reasons for the increase in capital inflows include that domestic and foreign institutional investors have intensified their search for yield and preference for investments generating relatively high returns amid the prolonged low interest rate environment. On the back of these increased inflows, investment by PE funds in firms has expanded globally, helping firms with the smooth procurement of funding. How these developments will affect the means of financial intermediation and thus the growth of companies in Japan warrants attention. Moreover, in terms of risks to the financial system, there are concerns that PE funds may increase their investments in firms using excessive leverage through LBO loans. These developments need to be monitored carefully.

* Currently at the Kagoshima Branch.

** Currently at the Monetary Affairs Department.

[1] "Capital inflows" represent the total commitment from investors to the PE funds formed in each year. ("Capital inflows" thus are a flow concept on a gross basis.) In practice, capital flows take place only after a PE fund has identified an investment project and asked investors to make funds available (capital call) within the amount they committed. Therefore, another way to describe "dry powder" is as the unused commitment balance (which is a stock concept) that has not been subject to a capital call.

[2] See the following reports:

Bank for International Settlements, "Private Equity and Leveraged Finance Markets," July 2008.

D. Gregory, "Private Equity and Financial Stability," BOE Quarterly Bulletin, Q1 2013.

[3] Meanwhile, buyout funds can also be divided into several types, such as those investing only in unlisted companies, those investing in listed companies through a TOB (take-over bid) when a listed company becomes unlisted, and those investing when a company sells a non-core business.

[4] Hedge funds can also be distinguished in terms of various investment strategies. For details, see the following report:

N. Higashio, T. Terada and T. Shimizu, "Changes in Hedge Fund Investment Behavior and the Impact on Financial Markets," Bank of Japan Review 06-J-18, December 2006.

Activist funds are funds aiming at raising the stock price (corporate value) of a company by playing an active role in its management based on a certain holding of listed shares.

[5] In the case of large-scale projects, the funds sometimes provisionally finish identifying investment projects before the fundraising.

[6] The return on PE funds (internal rate of return) is calculated using the net asset value of investment projects at the beginning and end of the period. Therefore, when PE funds use LBO loans or finance all their investments using bridge loans, this will raise the face value of returns.

[7] For details on the guidance by financial supervisory authorities in the United States and Europe, see:

FRB, FDIC, and OCC, "Interagency Guidance on Leveraged Lending," March 2013.

FRB, FDIC, and OCC, "Frequently Asked Questions (FAQ) for Implementing March 2013 Interagency Guidance on Leveraged Lending," November 2014.

ECB, "Guidance on Leveraged Transactions," May 2017.

Bank of Japan Review is published by the Bank of Japan to explain recent economic and financial topics for a wide range of readers. This report, 18-E-1, is a translation of the original Japanese version, 18-J-1, published in April 2018. The views expressed in the Review are those of the authors and do not necessarily represent those of the Bank of Japan. If you have comments or questions, please contact Financial Institutions Division Ⅲ, Financial System and Bank Examination Department (Tel: +81-3-3279-1111). Bank of Japan Review and Bank of Japan Working Paper can be obtained through the Bank of Japan's Web site (http://www.boj.or.jp/en).